

BELTON BUILDING Accounts

(Image ref: DSCF7639 – DSCF7657) Transcribed by Dawn Bowskill, Belton Research Group, October 2022

Lincolnshire Archives, Brownlow Archive, BNLW/2/1/2/12

John Braithwaite¹ to Jeffry Wyatt² 9 Dec 1816 re water engine

My Lord,

I send Mr. Braithwaits & my plan for the pipes & is sent to him, under another cover I have enclosed the particulars.

*I have the honour to be
yr Lordships humble servant
Jeffry Wyatt*

London

Dec 10th 1816

Addressed to: The Earl Brownlow, Belton House, Grantham

DSCF7642, 43, 44

It appears from your Plan and description, that any Power necessary may be had at Pleasure to drive a Water Wheel for Working an Engine for the supply of the House etc. so that it will be for his Lordship to say how many Gallons in one minute he will have delivered in the Cistern; I have estimated roughly what the Expense for an [Engine to work with a Water Wheel](#), with Cast iron Main Shaft, the Engine with Brass Cylinders 3 Inch Cast Iron Pipes, to the top of Cistern in House, the length of Pipes described in your Sketch with Brass Cocks and Screws for leather hose and fixing (without carriage) will Come to about £540. This engine would be constructed to deliver into the Cistern 14 Gallons of Water in one Minute.

An Engine constructed to Raise double that quantity of water in one Minute 28 or 30 Gallons with a 4 Inch Cast Iron Main Would Come to about 500 Pounds.

I have taken the Liberty of stating the Power of the above two Engines for his Lordships Information, as the kind of Engines I have made for the supply of Noblemens' Houses. But as I said before his Lordship may have a much greater quantity raised in one minute by the Power of his River.

*If this Lordship wishes a specific Estimate, it would be necessary I should see the Place and take accurate dimensions of the different Branches and also to determine if the wheel and Engine would be fixt [*fixed*] in One of the Arches or on the side of the Bank.*

I am Sir

*Your Humble Servant
Jn Braithwaite*

¹ [John Braithwaite](#), the younger FSA (1797-1870), was an English engineer who invented the first steam fire engine c.1830. He also co-designed the first [locomotive](#) in 1829 to have covered a mile in less than a minute.

² [Sir Jeffry Wyattville](#) RA (1766-1840) an English architect and garden designer, involved with constructing the Italian Garden.

New Road

Fitroy [Fitzroy?] Square
December 9th 1816

To J. Wyatt Esq. (DSCF7646)

DSCF7647, 7648

Sir,

Agreeable to your desire, I have taken into consideration the Plan of Belton House, the Seat of /earl Brownlow you have sent me this day, as to the best method of Constructing an Engine to Force Water too the roof of the Main House, and to such other Parts as may appear Expedient.

The Cistern 8 feet long 4^{ft} wide and 5^{ft} deep will Contain 900 Gallons, which may be sufficient, but if there is not any thing in the Way to Prevent its being made a few feet longer it might be done, as the Wall you intend to Put it on would be sufficiently strong.

The best Line for the Pipe would be as you state through the House, then Branches may be fixt [fixed] at Pleasure to supply any Part with Water in Case of Fire, also to the Intended Brewhouse, which would be Very desirable, and to the Stables, and Bason in Garden.

³ William John Braithwaite, father.

with Elm sides fitted to Arms, two large cast iron
Plumbing Blocks with brasses bolts and plates fitted
To bearings of Water Wheel & a cast iron shaft
With two boxes & pins to connect Water Wheel to
Engine.

DSCF7654

615 Yards of 4 ⁱⁿ . cast iron Pipe main from Engine)	276..15.. 0
To House etc. — — — — @ 9 ^s per y ^d ..)	

Fifteen cast iron Bends with Sockets, flances [flanges] & branches to D°. Ten lengths of cast iron Pipe with flances & sockets drilled and filed flat to fit Cocks etc. and 5 cats iron connecting Sockets. — — —	49..11.. 0
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An 1½ ⁱⁿ . gun metal screw bottom stop Cock with a 4 ⁱⁿ) flance [flange] at one end drilled & screw'd to a branch)	2..10.. 0
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A ¾ gunmetal Cock with a Screw and boss & 4 feet of) ½ ⁱⁿ . copper Pipe — — —)	1.. 3.. 0
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A 6 ⁱⁿ . Copper Head and spout with a 2in. gun metal) spindle safety Valve and stuffing box, and a) wrought iron Lever and standard with joint pin) & key fitted to head for safety to Engine. — —)	4..18.. 0
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16 Copper Screws, Two 6 ⁱⁿ . leather flances & 6-5/8 iron) flance bots and nuts — — — —	1.. 4.. 4
)	£793..11.. 4

Carried Over

DSCF7655

1817	Brought Over	£ 793..11..4
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Sept 1 st	A 4 ⁱⁿ Copper Pipe 1 ^{ft} 10 ^{ins} long with an 9 ⁱⁿ flance braz'd to D°. beviling [bevelling] a 5 ⁱⁿ Copper flance with 8 ⁱⁿ of 2 ⁱⁿ copper Pipe braz'd beviling to a d°. drilled & fitted to flances on iron Pipe, 2 ^{ft} 2 ⁱⁿ of 4 ⁱⁿ Copper pipe and a 4 ⁱⁿ Copper Bend, a tinned copper Rose to fit 4 ⁱⁿ iron pipe and 3 ^{ft} 2 ⁱⁿ of Inch copper Pipe — —	5..17.. 6
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Two 4 ⁱⁿ Sluice Cocks with gun metal Valves and faces to open with elevating Screws — — —	22.. 0.. 0
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A wrought iron Socket Wrench 6 feet long with stop and T handle — — — —	1.. 9.. 6
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Three 2½ ⁱⁿ gun metal taper hose Cocks with screw'd noses to fit hose Screws the flances drilled & screw'd	15.. 0.. 0
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Five 1½ⁱⁿ gun metal taper hose Cocks with screw'd noses to fit hose Screws the flances drill'd & screw'd 12..10.. 0

Five 5ⁱⁿ Copper flances with 2ⁱⁿ of 1½ⁱⁿ Copper Pipe chamber'ed [chamfered] & braz'd to d°. drilled & screw'd to Cocks — — — 2..10.. 0

An Inch gun metal screw bottom Cock with a side flance to discharge the Main of Engine — 1.. 3.. 0

| DSCF7656 | | |

The Apparatus for opening Sluice Gate, consisting of a cast iron Rack with two caged segments & plates and a cast iron frame with wheel and two pinions wrought iron Axes and handle, and a cast iron bearing with wrought iron Axes bolts & plates for support of lever. — 22..19.. 0

Two wrought iron T wrenches and eight small)
Wrenches for Cocks — — —) 3..18.. 6

30 — 5/8 iron Bolts and nuts, 28 — ½ⁱⁿ iron Bolts &)
nuts 16 Copper Screws, 16 leather flances & a 6½ⁱⁿ) 6.. 6..10
iron blank for joints to Pipes & Cocks — —)

Solder for Joints to Copper Pipe — Abt. 1/5 pr lb. 14d.

Packing the above with hampers etc. — — 0..15.. 0

Oct^{br} 2nd 182 feet of 3ⁱⁿ leather hose — — @4/- ft. 36.. 8.. 0

Four Pair of 2½ⁱⁿ gun metal swivel hose screws)
lap'd [lapped] to leather hose — —) 6.. 0.. 0

Two copper branch Pipes with nossils [nozzles] &)
screws for 3ⁱⁿ leather hose — — —) 7.. 0.. 0

Two Wrenches for swivel Screws 0..11.. 0

A Packing case and Packing — — 0..19.. 0

Carried Up £940..17.. 2

DSCF7657

Oct^{br} 7th 276 feet of 1½ⁱⁿ leather hose — — @ 2/3^d ft. Brought Up £940..17.. 2

Six pair of 1½ⁱⁿ gun metal swivel hose Screws lap'd) 31.. 1.. 0

to leather hose — — —) 6.. 6.. 0

Five Copper branch Pipes with nosils & screws for)

	1½ ⁱⁿ leather hose	—	—	—	)	5.. 5.. 0
	Two wrenches for swivel Screws	—	—			0..11..0
	A Packing Case and packing	—	—	—		0..16.. 0
	Three Engineers time fixing Engine & Water Wheel				)	
	laying Pipes, Bends etc 231 days	—	@7/6 ^d		)	86..12.. 6
	Allowance Paid the Men	—	—	—		18.. 4.. 0
	Lodging	—	—	—	—	3.. 7.. 0
	Coach hire	—	—	—	—	9..18.. 0
Dec ^r 6 th	Three gun metal double connecting Screws to				)	2.. 0.. 0
	connect the hose pipes to Cocks etc and engraving)					
	A Packing Case	—	—	—		0.. 2.. 0
	A gun metal Apparatus for a Fountain	—	—			10.. 0.. 0
				C ^r		<u>£1114..19.. 8</u>
	By Cash rec ^d for the Men of M ^r . Wilson	—				18.. 0.. 0
						<u>£1096..19..8</u>